

*A*  
*Sub B1 (contd)*

ii) ~~depositing a second amount of metal on said seed layer at a substrate temperature and power[, providing] that are sufficient to (i) inhibit formation of filamentous metal phases having a resistivity greater than that of said metal, and (ii) provide a metal diffusion rate and a [second] metal deposition rate sufficient to inhibit void formation in an opening having an aspect ratio of at least [1.0] 2.0; and~~

iii) ~~depositing a third amount of metal on said second amount of metal.~~

Please add new claims 22-24 as follows:

*A*  
*Sub B2*

22. A method of forming a layer of aluminum-containing metal on a substrate, comprising:  
i) ~~depositing a first amount of a metal comprising aluminum on a seed layer of the metal, said seed layer being sufficient to cover a substrate surface comprising titanium, at a substrate power sufficient to inhibit formation of a phase of  $TiAl_3$  having a resistivity greater than that of said metal; and~~  
ii) ~~depositing a second amount of metal on said first amount of metal.~~

*A2*

23. The method of claim 22, wherein said first amount of said metal is deposited at a metal diffusion rate and a metal deposition rate sufficient to inhibit void formation in an opening having an aspect ratio of at least 2.0.

*A3*  
*Sub B3*

24. A method of forming a layer of aluminum-containing metal on a substrate, comprising:  
i) ~~depositing a first amount of a metal comprising aluminum on a seed layer of the metal, said seed layer being sufficient to cover a substrate surface, at a substrate power sufficient to inhibit formation of a phase containing said metal having a resistivity greater than that of said metal and at a metal diffusion rate and a metal deposition rate sufficient to inhibit void formation~~